

# DIRECTIONAL INTERPOLATION METHOD USING DCT INFORMATION AND RE- LATED DEVICE

## Abstract

The invention provides a method for interpolating a pixel within an image. The image has a plurality of pixels arranged in a matrix format. The method includes detecting if there is an edge in a block of the image according to a Discrete Cosine Transform (DCT) data of the block, within which the pixel is located. The method further includes if an edge is detected, determining an interpolation direction of the pixel according to the DCT data, and interpolating the pixel according to the interpolation direction. The method further includes if no edge is detected, interpolating the pixel vertically or horizontally. A device for implementing the method is also provided.